



iPhone 4S Speaker Enclosure Replacement

Replace the speaker enclosure near the bottom of the iPhone 4S.

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INTRODUCTION

Use this guide to replace a blown speaker enclosure closest to the bottom edge of the iPhone 4S.



TOOLS:

- [P2 Pentalobe Screwdriver iPhone](#) (1)
- [Phillips #000 Screwdriver](#) (1)
- [iFixit Opening Tools](#) (1)
- [Tweezers](#) (1)






PARTS:

- [iPhone 4S Speaker Enclosure](#) (1)

Step 1 — Rear Panel



-  Before you begin, discharge your iPhone battery below 25%. A charged lithium-ion battery can catch fire and/or explode if accidentally punctured.
- Power off your iPhone before beginning disassembly.
- Remove the two 3.6 mm Pentalobe P2 screws next to the dock connector.
-  Be sure the driver is well seated when removing Pentalobe screws, they are very easy to strip.
-  During reassembly, we recommend you replace the 5-point screws with equivalent Phillips screws. Our [Liberation Kit](#) provides the tools and screws needed to replace the Pentalobe screws with Phillips screws.

Step 2



- Push the rear panel toward the top edge of the iPhone.

i The panel will move about 2 mm.

Step 3



- Pull the rear panel away from the back of the iPhone, being careful not to damage the plastic clips attached to the rear panel.
- Remove the rear panel from the iPhone.

Step 4 — Battery



- Remove the following screws securing the battery connector to the logic board:
 - One 1.7 mm Phillips screw
 - One 1.5 mm Phillips screw.
- Use a plastic opening tool to gently detach the battery connector from the socket on the device. Start lifting off the connector from the bottom side, by placing the tip of the tool between the loudspeaker enclosure and the metal cover of the connector.
- ⓘ The battery connector comes off vertically from the logic board. Do not apply force sideways.
- ⚠ Pay attention to the pressure contact underneath the top screw of the battery connector. This may come loose while prying the battery connector from its socket.

Step 5



- Use a plastic opening tool to pull the pressure contact from underneath the battery connector.
- ⚠ When reinstalling the pressure contact, be sure to clean it with a degreaser such as windex or isopropyl alcohol. The oils on your fingers have the potential to create wireless interference.
- ⚠ Take notice of the position of the small black ground clip on the upper screw of the battery connector. This clip is attached only by the upper screw. When reinstalling, it must be aligned so the gold contact point will press against the back cover.
- Be careful not to rip off the battery connector socket soldered on the logic board. There are 4 very small soldering points awaiting this mistake!

Step 6



- Insert the edge of a plastic opening tool between the battery and the outer case near the bottom of the iPhone.
- Run the plastic opening tool along the right edge of the battery and pry up at several points to completely separate it from the adhesive securing it to the outer case.

Step 7



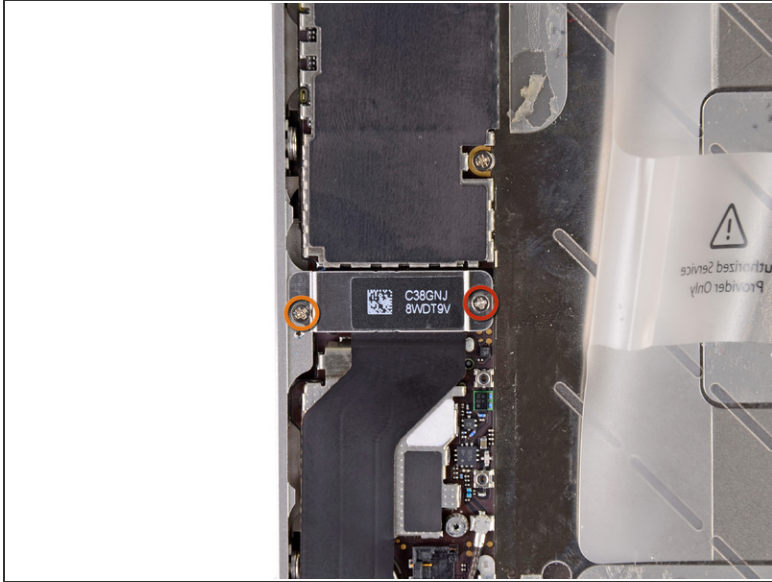
- Use the exposed clear plastic pull tab to peel the battery off the adhesive securing it to the iPhone.

⚠ Be careful not to pull the plastic pull tab too hard as it can be ripped off very easily.

- Remove the battery.

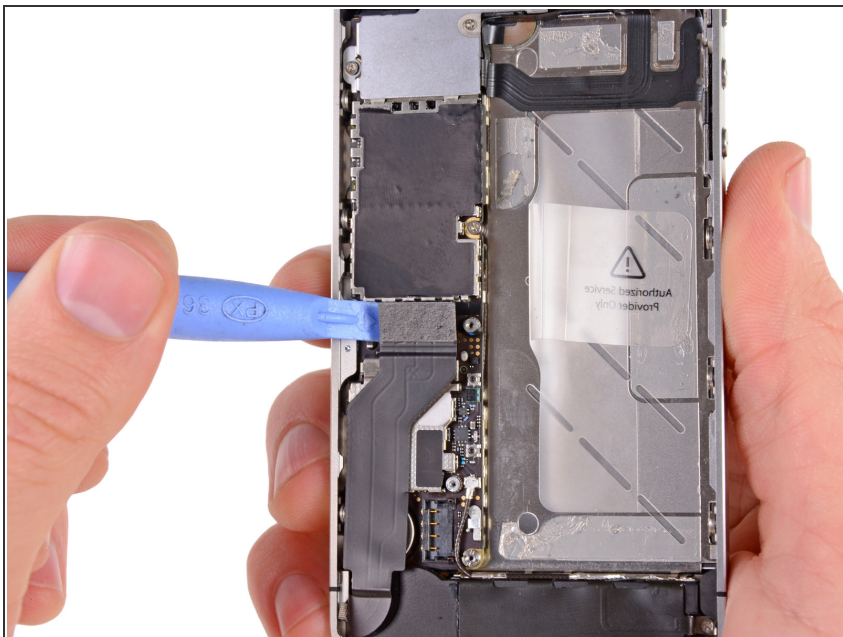
🔧 Perform a [hard reset](#) after reassembly. This can prevent several issues and simplify troubleshooting.

Step 8 — Speaker Enclosure Assembly



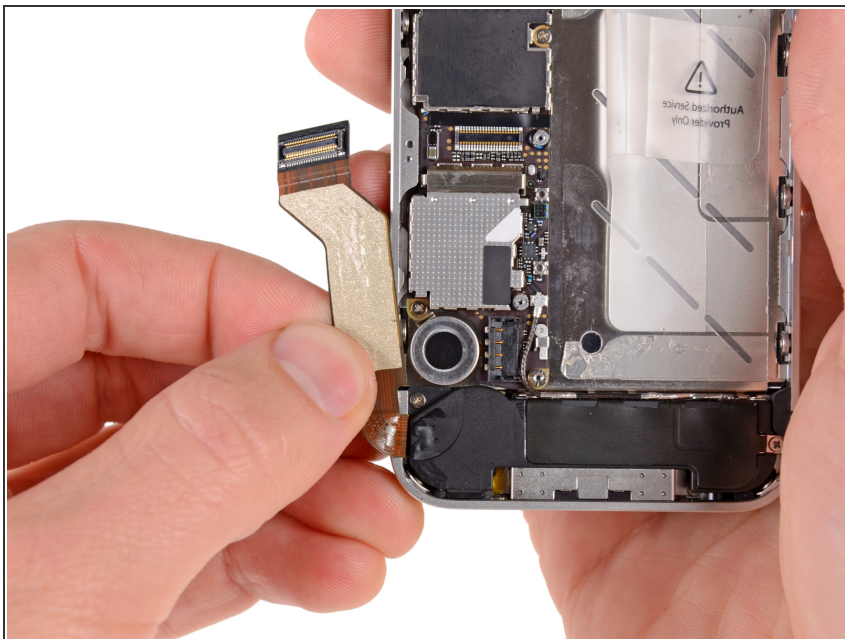
- Remove the following screws securing the dock connector cable cover to the logic board:
 - One 1.5 mm Phillips screw
 - One 1.2 mm Phillips screw
- Remove the metal dock connector cable cover.

Step 9



- Use the edge of a plastic opening tool to pry the dock cable up from its socket on the logic board.

Step 10



- Peel the dock connector cable off the adhesive securing it to the logic board and the side of the speaker enclosure.

Step 11



- Use the edge of a plastic opening tool to pry the cellular antenna cable up from its socket on the logic board.
- De-route the cellular antenna cable out from under the metal fingers attached to the logic board.

Step 12



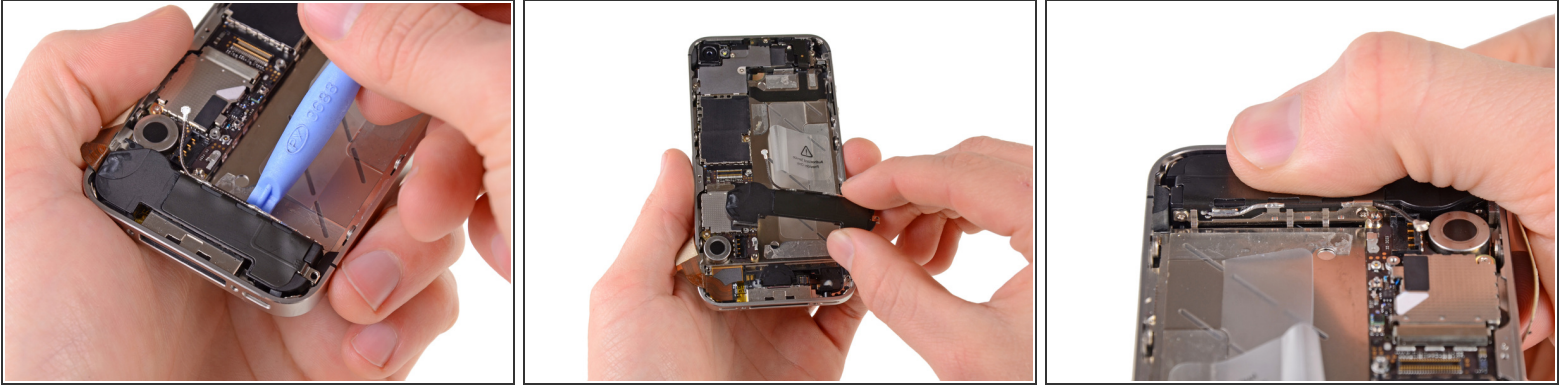
- Remove the two 2.4 mm Phillips screws securing the speaker enclosure assembly to the outer case.

Step 13



- Remove the small black spacer that was under the Phillips screw near the vibrator.

Step 14

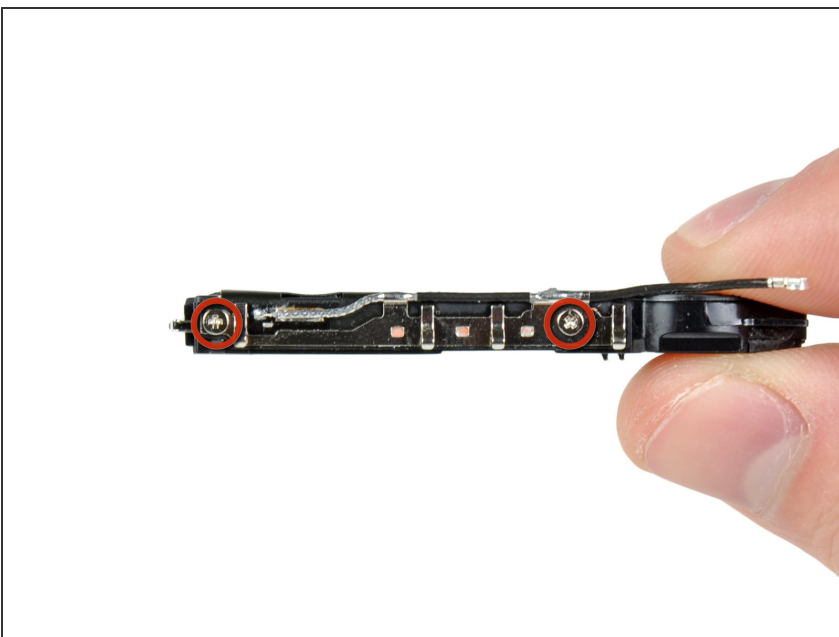


- Use a plastic opening tool to lift the speaker enclosure assembly out of the case, being sure not to damage the EMI fingers on the attached Wi-Fi antenna.
- Remove the speaker enclosure assembly.

✦ Before reinstalling the speaker enclosure assembly's screws, be sure the Wi-Fi grounding fingers are installed below the lip in the iPhone's metal case as seen in the third picture.

⚠ Before reassembly, be sure to clean all metal-to-metal contact points between the grounding fingers of the Wi-Fi antenna and the case of the iPhone with a de-greaser such as windex or isopropyl alcohol. The oils on your fingers have the potential to cause wireless interference issues.

Step 15 — Cellular Antenna



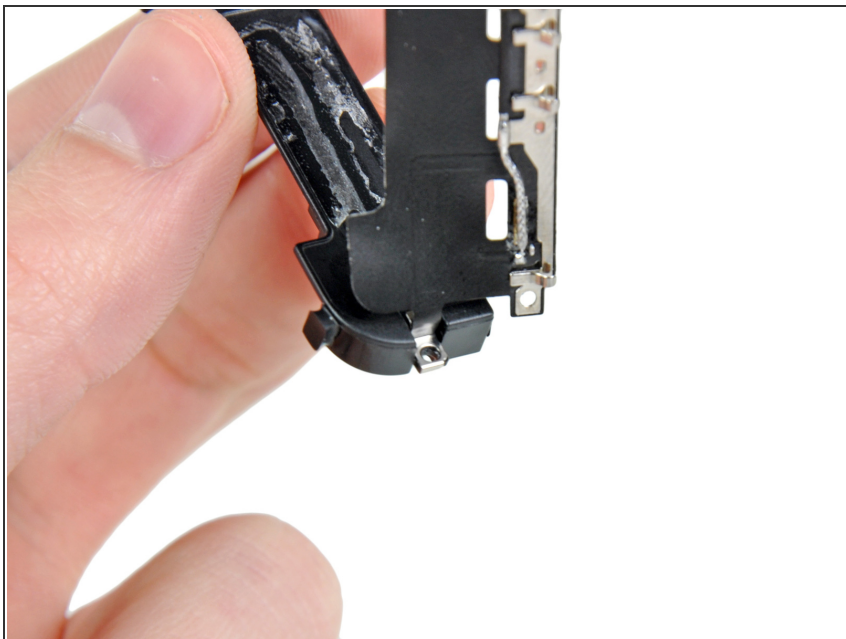
- Remove the two 1.6 mm Phillips screws securing the cellular antenna to the speaker enclosure.

Step 16



- Starting near the cellular antenna cable, use the edge of a plastic opening tool to peel the antenna off the speaker enclosure.
- Continue peeling the cellular antenna off the speaker enclosure, being careful not to rip the gold bracket attached to one of its edges.
- Remove the cellular antenna.

Step 17



- ★ When installing a new cellular antenna, be sure to slide the gold bracket over the ear molded into the speaker enclosure before sticking the antenna down.

Step 18 — Speaker Enclosure



- Speaker enclosure remains.

To reassemble your device, follow these instructions in reverse order.

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